

Exhibit 1

**Casualty Loss Reserve Seminar (CLRS)**

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**Current Events in the  
California Workers' Compensation Industry**

Alex Swedlow  
California Workers' Compensation Institute  
September 15, 2011

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Exhibit 2



**CWCI: Background**

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Established in 1964;  
Private, nonprofit organization of insurers representing approximately 80% of premium dollars and self-insured employers;  
Dedicated to improving the California workers' compensation system through four primary functions:

- Research
- Education
- Information
- Representation

**Website: [www.cwci.org](http://www.cwci.org)**

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Exhibit 3

Employers Insurance

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**Agenda**

**Medical & Indemnity Trend Analysis**  
**Medical Treatment Utilization**  
**Case-Mix Adjustment Analysis**

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### Benefit Development

- Data and Methods
- Medical and Indemnity Benefit Trends
- Medical Benefit Components
  - Medical Treatment
  - RX/DME
  - Medical/Legal
  - Medical Cost Containment
- Pharmaceutical Utilization
- Case-Mix Adjusted Medical Trend Analysis

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### Benefit Development

#### Data and Methods

- Industry claim information system (ICIS V12B)
- Policy, claim, benefit and medical service detail
- 2M claims with DOI between Jan 2002 and Sept 2010
- Medical benefits and medical bill review transactions through Dec 2010.

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### Benefit Development

- Medical
- Indemnity Benefit Trends (2-yr cap)

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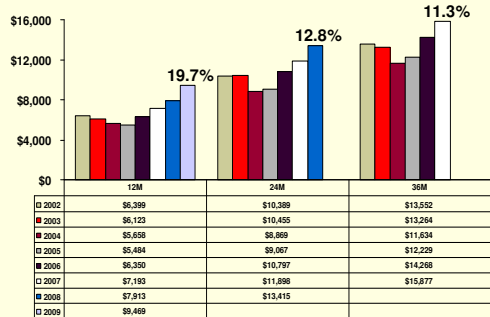
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### Average Medical Benefits Paid: Indemnity Claims



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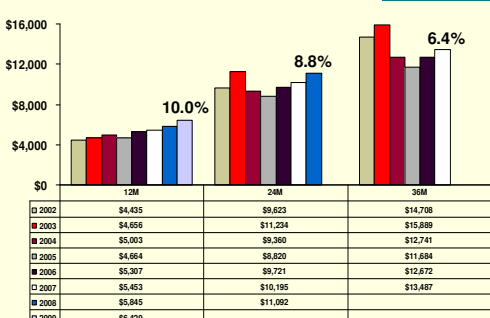
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### Average Indemnity Benefits Paid: Indemnity Claims



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### 2-Year Temporary Disability Cap

- Adjusted TD Benefit Payments
- Prevalence of Exempt Injuries
- TD Claims w/ > 2 Years of TD Benefits

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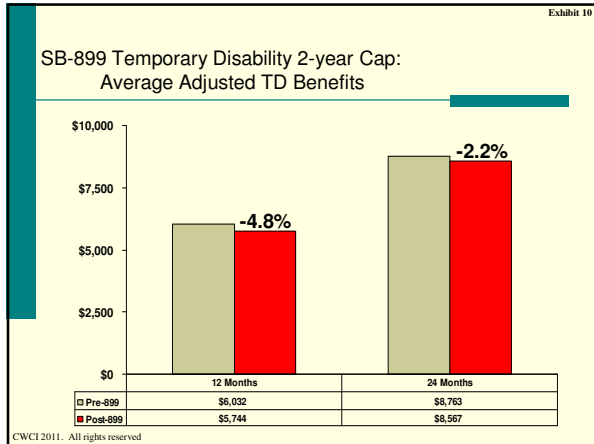
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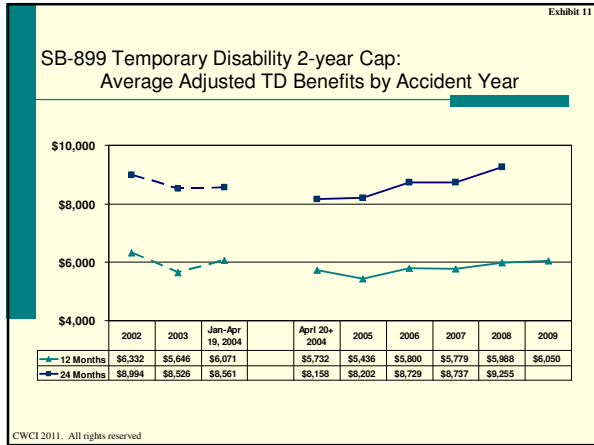
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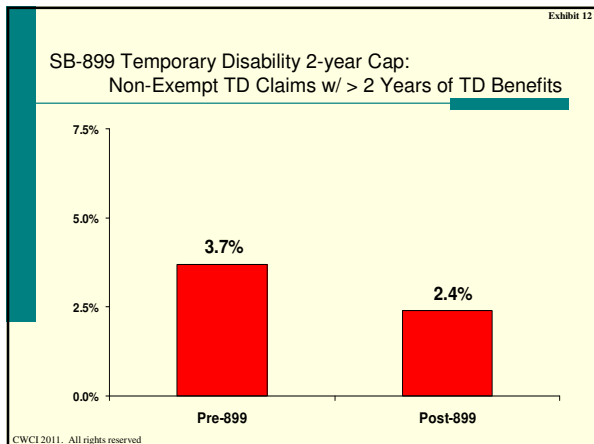
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## Benefit Development

- Medical Benefit Components
  - Medical Treatment
  - RX/DME
  - Medical/Legal
  - Medical Cost Containment

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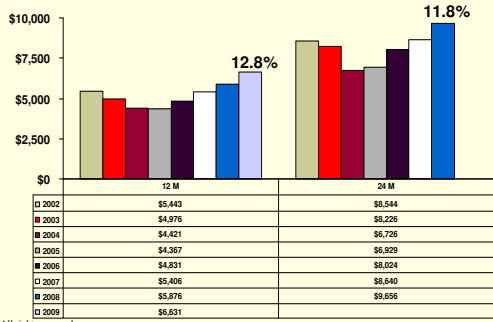
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## Average Sub-Category of Medical Benefits Paid: Medical Treatment, Indemnity Claims




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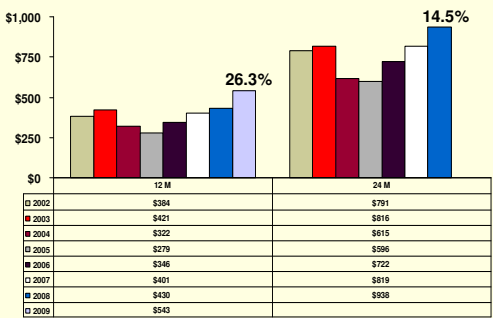
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## Average Sub-Category of Medical Benefits Paid: Pharmacy and DME, Indemnity Claims




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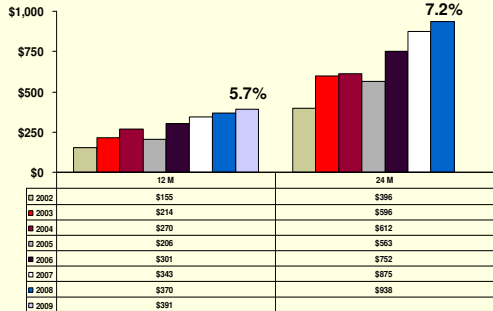
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Average Sub-Category of Medical Benefits Paid:  
Medical Legal, Indemnity Claims



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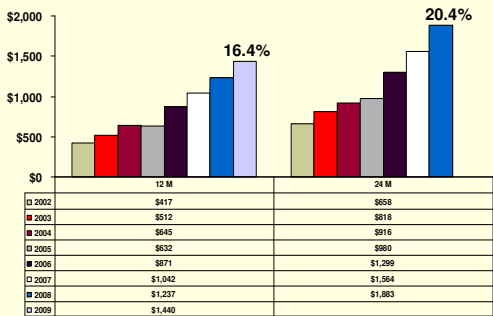
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Average Sub-Category of Medical Benefits Paid:  
Medical Cost Containment, Indemnity Claims



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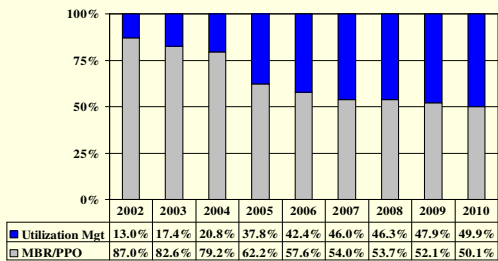
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Average Sub-Category of Medical Benefits Paid:  
Components of Medical Cost Containment



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### Medical Treatment Utilization and Cost By Fee Schedule

Fee Schedule Section:

- Evaluation & Management
- Surgery
- Medicine
- Physical Therapy
- Chiropractic Manipulation
- Medical Legal

Claims with >24 Visits of PT and Chiro

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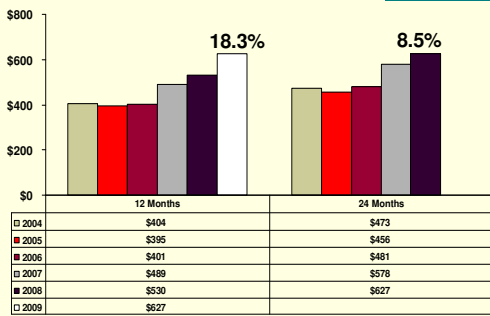
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### Outpatient Services by Accident Year – Fee Schedule Claims Evaluation & Management Services




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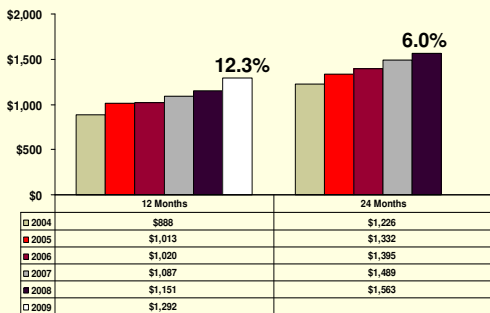
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### Outpatient Services by Accident Year – Fee Schedule Claims Surgery




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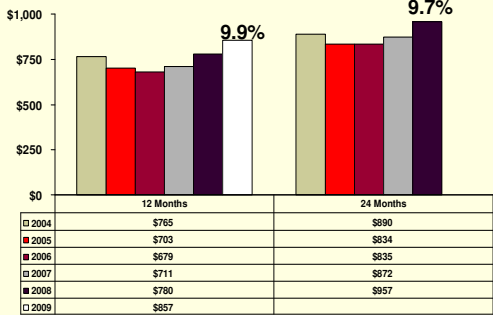
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**Outpatient Services by Accident Year – Fee Schedule Claims  
Physical Medicine**




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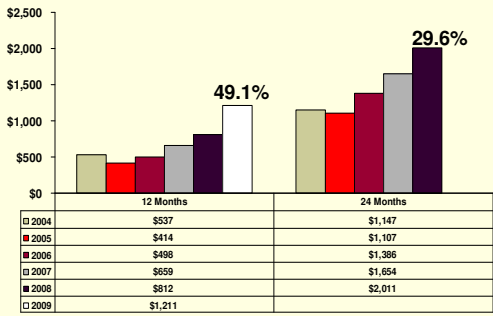
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**Outpatient Services by Accident Year – Fee Schedule Claims  
Medical/Legal Reports**




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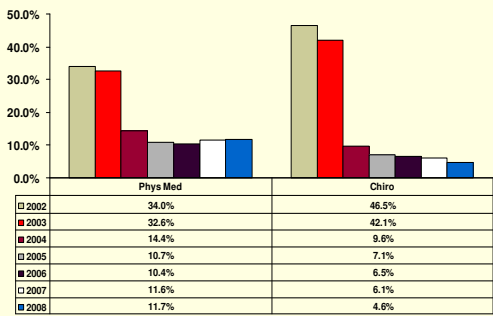
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**Physical Therapy and Chiropractic Manipulation  
Claims with PT & Chiro with > 24 visits**




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### Pharmaceutical Utilization and Cost

- Changing Role of Rx in Workers' Compensation
- Sole Source (Brand) and Multi-Source (Generic)
- Pain Management and the Compounds and Opioids
- Federal and State Prescription Drug Abuse and Pain Management Activity

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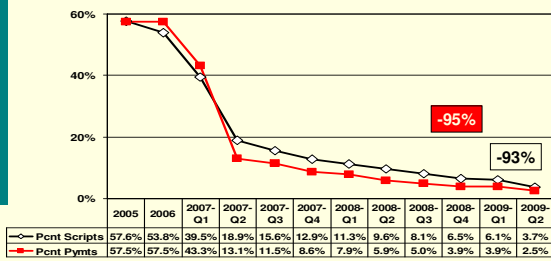
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### Pharmaceutical Utilization & Cost: Repackaged Drugs<sup>1</sup>



<sup>1</sup> Calculations are on a calendar year basis

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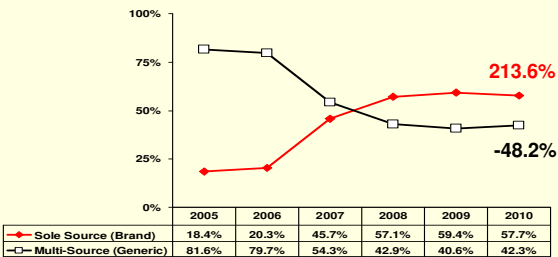
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### Preliminary Results Pharmaceutical Cost: Sole & Multi-Source Payments<sup>1</sup>



<sup>1</sup> Calculations are on a calendar year basis

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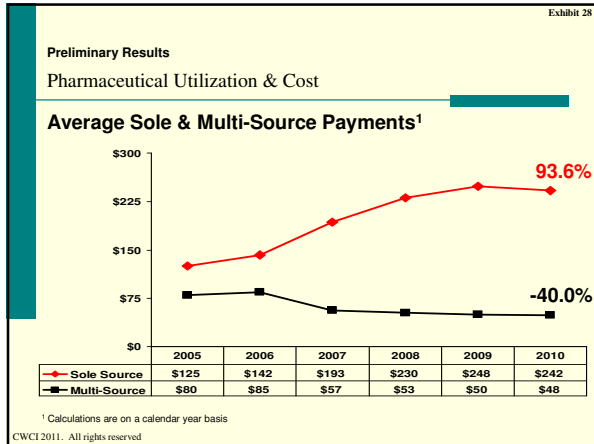
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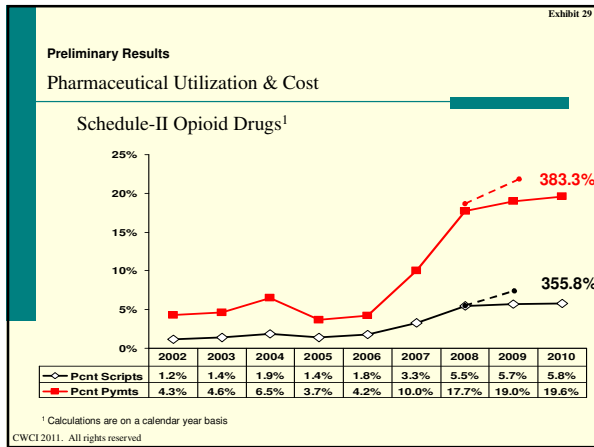
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### Case-Mix-Adjusted Factor Analysis of Medical Trends

#### Objectives

- Factors underlying rising medical costs?
  - Injured worker characteristics
  - Employer and Payor characteristics
  - Claim Characteristics
  
- Factor analysis isolates:
  - Weight (isolated cost contribution)
  - Slope (cost increasing or decreasing over the trend)
  - Prevalence (occurring more or less often)
  - Overall impact (interaction of power and prevalence)
  
- Variables inside & outside current controls/policies

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### Benefit Development (Preliminary Results)

- **Data and Methods**
  - ICIS V12B: 1.7M Claims
  - DOI 1Q/04 – 3Q/09
  - Policy And Claim Characteristics
  
- **Medical Bill Review Detail**
  - Injury Characteristics
  - Co-morbidities
  - Rx Utilization

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### Benefit Development (Preliminary Results)

- Regression Models on 12-month and 24-month unadjusted and case-mix-adjusted medical benefit trend
  
- Analysis of contributing factors Analysis

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### Case-Mix-Adjusted Factor Analysis of Medical Trends

#### Independent and Dependent Variables

CLAIM ID	GENDER	CAUSE OF INJ	EE STATUS	DxCAT GROUP
POLICY ID	TENURE	NOI	CAT CLM FLG	INPT HSP FLG
DOI	ER ZIP CODE	BODY PART	AWW	PRIMARY ICD9
DOB	EE ZIP CODE	ER NOTIF DT	EE CLASS	SECONDICD9
DOH	COUNTY	CAR NOTIF DT	RESOL DT	TERT ICD9
DOD	REGION	CLOSED DT	SURG IND	TD DAYS
POLICY YR	GOV CLASS	REOPEN DT	IND MED FLG	MED @12M
INJ YR	INDUSTRY	INIT DENIAL	1 <sup>ST</sup> DOS	MED @24M
CLAIM STAT	PREMIUM	DENIAL DT	ICD9	
CLAIM TYPE	LITFLG	METH OF RES	CPT4	

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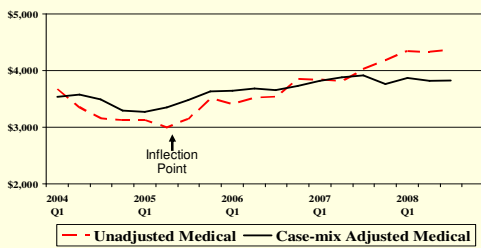
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### Case-Mix-Adjusted Factor Analysis of Medical Trend @ 24 Months




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### Case-Mix-Adjusted Factor Analysis of Medical Trend Influence of Cost, Slope & Prevalence on Medical Cost

#### Definition of Terms

Model Output	Description
Additional Medical Cost @ 24 Months (Beta, Full Model)	The average amount contributed to 24-month claim costs over the full study period.
Slope (Beta Slope Model)	The average amount that this variable's quarterly contribution to 24-month claim costs increased over the study period.
Prevalence Slope (Beta Prev Model)	The average amount that this variable's prevalence increased or decreased over the study period.
Overall Impact	

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Case-Mix-Adjusted Factor Analysis of Medical Trend  
 Influence of Cost, Slope & Prevalence on Medical Cost

Examples of Employer Characteristics

	Additional Med Cost @ 24 Months (Beta, Full Model)	Slope (Beta Slope Model)	Prevalence Slope (Beta Prev Model)	Overall Impact on Trend
Construction	\$ 266	\$(28)	-8.9%	↓
Agriculture	\$200	\$(1)	4.0%	↑
Prof and Clerical	\$404	\$39	31.2%	↑
Aud Prem <\$1K	\$206	\$(10)	2.2%	↑
Aud Prem <\$500-999K	\$(133)	\$(11)	-30.7%	↑

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Case-Mix-Adjusted Factor Analysis of Medical Trend  
 Influence of Cost, Slope & Prevalence on Medical Cost

Examples of Claim Milestones

	Additional Med Cost @ 24 Months (Beta, Full Model)	Slope (Beta Slope Model)	Prevalence Slope (Beta Prev Model)	Overall Impact on Trend
Indemnity (non-litigated)	\$1,338	\$67	2.4%	↑
Indemnity (litigated)	\$7,001	\$255	-2.6%	↑
MPN	\$(159)	\$(22)	193.5%	↓
Inpatient Admission	\$15,951	\$470	-6.2%	↑
Opioid Rx	\$1,840	\$30	14.5%	↑
Psychotropic Rx	\$8,331	\$ 388	-2.7%	↑

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Case-Mix-Adjusted Factor Analysis of Medical Trend  
 Influence of Cost, Slope & Prevalence on Medical Cost

Examples of Co-morbidities and Secondary Conditions

	Additional Med Cost @ 24 Months (Beta, Full Model)	Slope (Beta Slope Model)	Prevalence Slope (Beta Prev Model)	Overall Impact on Trend
Substance Abuse	\$2,528	\$(87)	-2.1%	↑
Mental Health	\$4,722	\$(80)	5.5%	↑
Circulatory System	\$7,812	\$55	-0.3%	↑
Obesity	\$1,787	\$163	10.3%	↑
Metabolic & Endocrine	\$5,232	\$83	1.1%	↑
Inflam & Degen	\$2,005	\$(92)	-13.4%	↑

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